

[Title of Document] ABSTRACT

[Abstract]

[Problem] To make a wavelength tunable light source capable of measuring various kinds of characteristics concerning wavelength such as wavelength loss characteristic speedily and accurately.

[Solving Means] A wavelength tunable light source 10 constituted by: a semiconductor laser 1; an anti-reflection film applied onto one end surface 1a of the semiconductor laser 1; a lens 6 for collimating light made to exit from the one end surface 1a of the semiconductor laser 1 through the anti-reflection film; and a wavelength selection portion constituted by a combination of a diffraction grating 2 and a mirror 3 for selecting light with a desired wavelength and returning the selected light to the semiconductor laser 1 to thereby make laser oscillation. A center of rotation of the mirror 3 is provided in a position P0 where mode hopping can be suppressed when the wavelength is tuned, and rotation of the mirror 3 is driven by a direct drive system by using a motor 4 having a rotation shaft 4a in the center of rotation of the mirror 3.

[Selected Drawing] Fig. 1